AMENDMENT TO THE CLAIMS

1.   (Currently Amended) A computer system for use with web-based applications comprising:

> a web browser application;
>
> at least one web form running on the web browser;
>
> a web server capable of processing ~~Java code and~~ web-based forms;
>
> a <u>database stored in memory, the memory</u> ~~storage schema~~ coupled to said computer system, wherein said web server is used for manipulating data with rules compiled in said web browser from said <u>database</u> ~~storage schema~~; and
>
> files containing manipulation rules in said <u>database</u> ~~storage schema,</u> the manipulation rules comprising at least three hierarchically organized views, with each view utilizing an execution sequence of manipulation functions.</u>

2.   (Currently Amended) A computer system according to claim 1, wherein the <u>manipulation rules are organized as a table-based system</u> ~~web server comprises an application for compiling at least one Java page including manipulation rules from the storage schema.~~

3.   (Currently Amended) A computer system according to claim 1, wherein the <u>data is manipulated according to a highest priority view</u> ~~web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method and doManipulation(String tag, String value) method.~~

4.   (Currently Amended) A computer system according to claim ~~1~~ <u>3</u>, wherein <u>the highest priority view contains data describing a name of the highest priority view and an application name, the application name differentiating field names from those in other applications</u> ~~Java servlet methods are compiled into byte code files when the web server is started.~~

5.   (Currently Amended) A computer system according to claim 4 <u>3</u>, wherein <u>if the data to be manipulated does not contain an entry matching the highest priority view, then the data is</u>

manipulated according to a second-highest priority view ~~the web server calls a plurality of~~ ~~Java servlet methods including getManipulationSet(String ApplicationName, String~~ ~~Application Version, String Application User) method.~~

6.   (Currently Amended) A computer system according to claim 5, wherein <u>if the data to be</u> <u>manipulated does not contain an entry matching the second-highest priority view, then the</u> <u>data is manipulated according to generic functions</u> ~~the web server calls a Java servlet~~ ~~method doManipulation(String tag, String value)~~.

7.   (Currently Amended) A computer system according to claim 1, wherein said manipulation rules manipulate <u>long distance ordering</u> ~~comprise at least three main views~~ ~~of hierarchical organized~~ functions.

8.   (Currently Amended) A computer system according to claim ~~7~~ <u>5</u>, wherein <u>the second-</u> <u>highest priority view contains data describing a generic string that is used to match a</u> <u>name of the highest priority view to a defined character</u> ~~the web server calls a plurality of~~ ~~Java servlet methods including getManipulationSet(String ApplicationName, String~~ ~~Application Version, String Application User) method and doManipulation(String tag,~~ ~~String value) method~~.

9.   (Currently Amended) A computer system according to claim ~~7~~ <u>3</u>, <u>wherein the highest</u> <u>priority view has the execution sequence of first converting date data to a four-digit year,</u> <u>then converting the date data to 01/01/1996 if not prior to that date, then converting the</u> <u>date data to 12/31/2002 if after that date</u> ~~comprising a storage schema in the format of an~~ ~~Oracle database~~.

10.   (Currently Amended) A computer system according to claim ~~7~~ <u>1</u>, wherein said manipulation rules are represented in the form of Lightweight Directory Access Protocol.

11.   (Currently Amended) A computer system according to claim 4 <u>1</u>, <u>wherein said database is</u> <u>represented as an Oracle® database</u> ~~further comprising an Oracle database and a table-~~ ~~based system of rules organized into three hierarchically organized views~~.

12.   (Currently Amended) A computer system according to claim 4 <u>1</u>, wherein said <u>database</u> ~~storage schema~~ is represented by Lightweight Directory Access Protocol ~~and includes~~ ~~three hierarchically organized views~~.

13.   (Currently Amended) A web server system comprising:

a plurality of web browser applications;

means for performing manipulation service on data submitted by said at least one
of the web browser applications;

means for processing web forms;

means for storing and retrieving a plurality of manipulation rules for performing
said manipulation service, the manipulation rules comprising at least three hierarchically
organized views, with each view utilizing an execution sequence of manipulation
functions; and

means for compiling manipulation rules into said at least one web application in
order to perform said manipulation service.

14.   (Original) A web server system according to claim 13, comprising means for initiating a
recompiling of said at least one web application.

15.   (Currently Amended) A web server system according to claim 13, wherein said means for
storing and retrieving manipulation rules comprises an Oracle® database.

16.   (Currently Amended) A web server system according to claim 13, wherein said
manipulation rules are stored in a schema in the form of Lightweight Directory Access
Protocol.

17.   (Currently Amended) A web server system according to claim 14 13, wherein the data is
manipulated according to a highest priority view said Oracle database contains a table-
based system of rules organized into at least three hierarchically organized views.

18.   (Currently Amended) A web server system according to claim 14 17, wherein if the data
to be manipulated does not contain an entry matching the highest priority view, then the
data is manipulated according to a second-highest priority view further comprising a

AMENDMENT TO THE CLAIMS

1.   (Currently Amended) A computer system for use with web-based applications comprising:

  a web browser application;

  at least one web form running on the web browser;

  a web server capable of processing ~~Java code and~~ web-based forms;

  a <u>database stored in memory, the memory</u> ~~storage schema~~ coupled to said computer system, wherein said web server is used for manipulating data with rules compiled in said web browser from said <u>database</u> ~~storage schema~~; and

  files containing manipulation rules in said <u>database</u> ~~storage schema~~, <u>the manipulation rules comprising at least three hierarchically organized views, with each view utilizing an execution sequence of manipulation functions.</u>

2.   (Currently Amended) A computer system according to claim 1, wherein the <u>manipulation rules are organized as a table-based system</u> ~~web server comprises an application for compiling at least one Java page including manipulation rules from the storage schema~~.

3.   (Currently Amended) A computer system according to claim 1, wherein the <u>data is manipulated according to a highest priority view</u> ~~web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method and doManipulation(String tag, String value) method~~.

4.   (Currently Amended) A computer system according to claim ~~1~~ <u>3</u>, wherein <u>the highest priority view contains data describing a name of the highest priority view and an application name, the application name differentiating field names from those in other applications</u> ~~Java servlet methods are compiled into byte code files when the web server is started~~.

5.   (Currently Amended) A computer system according to claim 4 <u>3</u>, wherein <u>if the data to be manipulated does not contain an entry matching the highest priority view, then the data is</u>

manipulated according to a second-highest priority view ~~the web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method~~.

6. (Currently Amended) A computer system according to claim 5, wherein if the data to be manipulated does not contain an entry matching the second-highest priority view, then the data is manipulated according to generic functions ~~the web server calls a Java servlet method doManipulation(String tag, String value)~~.

7. (Currently Amended) A computer system according to claim 1, wherein said manipulation rules manipulate long distance ordering ~~comprise at least three main views of hierarchical organized~~ functions.

8. (Currently Amended) A computer system according to claim ~~7~~ 5, wherein the second-highest priority view contains data describing a generic string that is used to match a name of the highest priority view to a defined character ~~the web server calls a plurality of Java servlet methods including getManipulationSet(String ApplicationName, String Application Version, String Application User) method and doManipulation(String tag, String value) method~~.

9. (Currently Amended) A computer system according to claim ~~7~~ 3, wherein the highest priority view has the execution sequence of first converting date data to a four-digit year, then converting the date data to 01/01/1996 if not prior to that date, then converting the date data to 12/31/2002 if after that date ~~comprising a storage schema in the format of an Oracle database~~.

10. (Currently Amended) A computer system according to claim ~~7~~ 1, wherein said manipulation rules are represented in the form of Lightweight Directory Access Protocol.

11. (Currently Amended) A computer system according to claim 4 1, wherein said database is represented as an Oracle® database ~~further comprising an Oracle database and a table-based system of rules organized into three hierarchically organized views~~.

12. (Currently Amended) A computer system according to claim 4 1, wherein said database ~~storage schema~~ is represented by Lightweight Directory Access Protocol ~~and includes three hierarchically organized views~~.

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~~schema in the form of Lightweight Directory Access Protocol and a table-based system of manipulation rules organized into at least three hierarchically organized views.~~

19.   (Currently Amended) A web server system according to claim ~~17~~ 18, wherein <u>if the data to be manipulated does not contain an entry matching the second-highest priority view, then the data is manipulated according to generic functions</u> ~~said Oracle database stores manipulation functions stored as hierarchically organized views that are dynamically updateable by an external administrator.~~

20.   (Currently Amended) A web server system according to claim ~~18~~ 13, wherein said <u>manipulation rules manipulate long distance ordering</u> ~~storage schema represented by Lightweight Directory Access Protocol represents manipulation functions stored as hierarchically organized views that are dynamically updateable by an external administrator.~~

21.   (Currently Amended) A web server system according to claim ~~13~~ 17, <u>wherein the highest priority view has the execution sequence of first converting date data to a four-digit year, then converting the date data to 01/01/1996 if not prior to that date, then converting the date data to 12/31/2002 if after that date</u> ~~comprising means for compiling Java servlet methods.~~

22.   (Currently Amended) A web server system according to claim ~~21~~ 18, <u>wherein the second-highest priority view contains data describing a generic string that is used to match a name of the highest priority view to a defined character</u> ~~comprising means to initiate a recompile of a web server in order to load updated manipulation rules.~~

23.   (Currently Amended) A computer-readable medium with instructions executable by a processor for providing a manipulation application service for web-based applications, the medium comprising instructions to:

receive ~~couple~~ a service request ~~from a data device~~ to a web server, the <u>service</u> request including data to be <u>manipulated</u> ~~validated~~;

generate a service session instruction, the service session instruction based at least in part on the service request;

send the service session instruction to one or more web servers, the service session instruction corresponding to one or more data manipulation requests from said customer data device;

compile at least one <u>page</u> ~~Java Server Page~~ based on stored manipulation rules in a database<u>, the manipulation rules comprising at least three hierarchically organized views, with each view utilizing an execution sequence of manipulation functions</u>; and

<u>receive</u> ~~send~~ a manipulation service response ~~to the data device~~, wherein the manipulation service response is based on the service request.

24. (Currently Amended) A method of providing manipulation data service with a web-based computer system comprising the steps of:

calling at least one ~~Java~~ server page from a web application;

compiling said at least one ~~Java~~ server page at a web server;

retrieving stored manipulation rules from a centralized storage ~~mass~~ coupled to said web server<u>, the manipulation rules comprising at least three hierarchically organized views, with each view utilizing an execution sequence of manipulation functions</u>; <u>and</u>

~~inputting data to a web form;~~

~~submitting the web form to the web browser;~~

manipulating data provided from said web application in accordance with said manipulation rules.

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25.   (Currently Amended) A method according to claim 24, <u>wherein the manipulation rules</u> <u>manipulate data according to a highest priority view</u> ~~further comprising the step of~~ ~~updating at least a portion of compiled manipulation rules by recompiling at least one~~ ~~Java server page~~.

26.   (Currently Amended) A method according to claim ~~24~~ <u>25</u>, <u>wherein if the data to be</u> <u>manipulated does not contain an entry matching the highest priority view, then</u> <u>manipulating the data according to a second-highest priority view</u> ~~comprising the step of~~ ~~calling a Java servlet method including getManipulationSet(String ApplicationName,~~ ~~String Application Version, String Application User) method and doManipulation(String~~ ~~tag, String value) method~~.

27.   (Currently Amended) A method according to claim ~~24~~ <u>26</u>, wherein <u>if the data to be</u> <u>manipulated does not contain an entry matching the second-highest priority view, then</u> <u>manipulating the data according to generic functions</u> ~~comprising the step of loading at~~ ~~least portion of said manipulation rules into objects~~.

28.   (Currently Amended) A method according to claim ~~26~~ <u>24</u>, <u>wherein said manipulation</u> <u>rules manipulate long distance ordering</u> ~~comprising the step of said Java server page~~ ~~directing JavaScript functions in accordance with said manipulation rules~~.

29.   (Currently Amended) A method according to claim ~~28~~ <u>25</u>, <u>wherein the highest priority</u> <u>view has the execution sequence of first converting date data to a four-digit year, then</u> <u>converting the date data to 01/01/1996 if not prior to that date, then converting the date</u> <u>data to 12/31/2002 if after that date</u> ~~comprising the step of periodically recompiling at~~ ~~least one Java server page~~.

30.   (Currently Amended) A method according to claim ~~28~~ <u>26</u>, <u>wherein the second-highest</u> <u>priority view contains data describing a generic string that is used to match a name of the</u>

highest priority view to a defined character ~~comprising the steps of deleting class files and recompiling at least one Java server page~~.

31. (Currently Amended) A method according to claim ~~28~~ 24, wherein said manipulation rules manipulate long distance ordering information having a highest priority view representing valid installation dates, a second-highest priority view representing available installation dates, and a generic view representing an allowable number of telephones ~~comprising the step of loading updated manipulation rules~~.

32. (Currently Amended) A method according to claim 24, wherein retrieving the stored manipulation rules comprises retrieving the manipulation rules in the form of an Oracle® database ~~comprising the step of sending a manipulation result to the web application~~.

33. (Currently Amended) A method according to claim ~~28~~ 24, wherein retrieving the stored manipulation rules comprises retrieving the manipulation rules in the form of an Lightweight Directory Access Protocol ~~comprising the step of sending a manipulation result to a user of the web application~~.

34. (Currently Amended) A method for validating data with a web server system, the method comprising:

a step for sending a data manipulation service request from a web user;

a step for generating a manipulation service instruction, the service instruction based at least in part on the manipulation service request from said web user;

a step for compiling a ~~Java~~ server page ~~containing Java files~~ into class files;

a step for reading ~~data~~ manipulation rules ~~information~~ from a database ~~data schema~~, the manipulation rules comprising at least three hierarchically organized views, with each view utilizing an execution sequence of manipulation functions;

a step for configuring the data manipulation information in the memory of a running program;

a step for executing ~~directing a JavaScript function in order to execute~~ a

manipulation function in accordance with the <u>manipulation rules</u> ~~information read from said data schema~~.

35.   (Currently Amended) A method according to claim 34, <u>wherein the manipulation rules manipulate data according to a highest priority view</u> ~~further comprising a step of a Java server page directing JavaScript functions in accordance with said manipulation information~~.

36.   (Currently Amended) A method according to claim 35, <u>wherein if the data to be manipulated does not contain an entry matching the highest priority view, then manipulating the data according to a second-highest priority view</u> ~~further comprising a step of recompiling at least one Java server page with updated manipulation information~~.

37.   (Currently Amended) A method according to claim ~~34~~ <u>36, wherein if the data to be manipulated does not contain an entry matching the second-highest priority view, then manipulating the data according to generic functions</u> ~~further comprising the step of deleting at least a portion of the class files and recompiling at least one Java server page~~.

38.   (Currently Amended) A method according to claim ~~34~~ <u>35, wherein the highest priority view has the execution sequence of first converting date data to a four-digit year, then converting the date data to 01/01/1996 if not prior to that date, then converting the date data to 12/31/2002 if after that date</u> ~~further comprising the step of loading updated manipulation information in the memory of the program~~.

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